

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

WAR FOOD ADMINISTRATION

Minimum Isolation Distances for Commercial Vegetable Seed Production

~~Reserve~~ Isolation refers to the necessary minimum distance separation between varieties to prevent either mechanical mixtures or cross-pollination.

The distance required depends upon the kind of crop, the direction of prevailing winds, the location of bee colonies or hives, the prevalence of insects, the presence of woods or other high growing vegetation and the frequency, density, and duration of fogs and cold windy weather.

The following distances are proposed as the minimum, recognizing that under many circumstances greater distances are advisable:

(between any two of table beet, mangel beet, sugar beet, swiss chard.
 1 mile (between types of corn (dent, pop, sweet, flour, waxy, etc.).
 320 rods (between celery and celeriac and between green and yellow celery.
 1760 yds. (between white or yellow fleshed carrots and orange fleshed carrots.
 5280 feet (between brassicas - see page 2.

(between any two varieties of an, one of the following: asparagus,
 (beet, broccoli, brussels sprouts, cauliflower, collard, kale,
 (kohlrabi, winter rape, cantaloupe, muskmelon, white melon,
 1/4 mile (carrot, celeriac, celery, chinese cabbage, cucumber, leek,
 80 rods (onion, okra, parsley, parsnip, pumpkin (*C. pepo*), radish,
 440 yds. (squash (*C. maxima*), sweet corn, spinach, turnip, rutabaga, or
 1320 feet (watermelon.
 (between varieties of cantaloupe and varieties of white melons.
 (between any two classes of lettuce, i.e. cos, stem, leaf, or heading.
 (between any two varieties of cabbage - see page 2.

(between any two varieties of pepper, eggplant, and tomato with a tall
 (dense growing crop as barrier between varieties.
 150 feet (between any two varieties of chicory, endive, and lettuce in the same
 (class with no tall growing barrier between varieties.

12 feet (of dense tall growing barrier such as sunflower, corn, etc. between
 (any two varieties of chicory and endive and between any two
 (varieties of lettuce in the same class.

(between any two varieties of peas or beans with a tight fence or tall
 (dense growing barrier to reduce occasional hybridization and
 6 - 12 ft. (prevent mixtures in harvesting and threshing. Weevil control
 (necessary at this short distance.

The concentration of one variety or type in one section would make unnecessary 1/4 or 1 mile distances between fields and also reduce the possibility of threshing machine mixture. One variety to a community or section is, therefore, to be advocated and encouraged. In the case of onion, Sweet Yellow Globe, Brigham Yellow Globe, Ohio or Michigan Yellow Globe, and Mclzers Yellow Globe could be planted in one section without harm to the commercial value of the seed. Strains of the same variety of beet and carrot could also be grown in adjacent fields without serious harm.

Stock seed lots should be given better isolation than seed for commercial use.

1945
MAR 7 1945

Minimum Isolation Distances 1/for Varieties and Types
of Brassica (Cabbages, Cauliflower, Kale, Etc.)

Classification of Varieties

Group 1. (Early Pointed)

Jersey Wakefield
Charleston Wakefield

Group 2. (Late Pointed)

Winniastadt

Group 3. (Early Round)

Golden Acre
Green Acre
Early Copenhagen
Resistant Detroit

Group 4. (Midseason Round)

Medium Copenhagen
Glory
Midseason Market
Ferrys Round Dutch
Racine Market
Marion Market) Yellows Res.
Globe)

Group 5. (Late Round-Danish)

Danish Ballhead
Reeds Ballhead
Oakview Ballhead
Penn. State Ballhead
Wis. Ballhead)
Wis. Hollander) Yellows Res.
Bugner)

Group 6. (Flat or Drumhead)

Steins Early Flat Dutch
Late Flat Dutch
All Seasons
Succession
Brunswick

Group 7. (Miscellaneous)

Red Cabbage
Savoy Cabbage
Kales
Kohlrabi
Brussels Sprouts
Sprouting Broccoli
Cauliflower
Collards
Winter Rapes

Isolation Distances

40 rods or 660 feet

Between any 2 varieties within any one group, except within group 7.

60 rods or 990 feet

- (a) Between any variety in group 1 and any variety in group 2.
- (b) Between any variety in group 3, 4, or 5 and any variety in any other of the groups 3, 4, or 5.

80 rods or 1320 feet

- (a) Between any variety in group 1 or 2 (pointed head) and any variety in group 3, 4, 5 (round head), or 6 (flat head).
- (b) Between any variety in group 3, 4, or 5 (round head) and any variety in group 6 (flat or drumhead).
- (c) Between any variety of any one of the 9 kinds in group 7 and any other variety of the same kind.

320 rods or 5280 feet

Between any variety in any one of the 9 kinds in group 7 and any variety in any of the other kinds in group 7 or in any of the other groups.

1/ It should be emphasized that these are minimum not average distances and that greater distances are desirable where they can be obtained.

March 10, 1945
Washington, D. C.